VERSION DESCRIPTION DOCUMENT

FOR THE

NASA PERSONNEL/PAYROLL SYSTEM

Software Release

8.8.3

PrISMS Contract

Date: 06/13/03

National Aeronautics and
Space Administration

George C. Marshall Space Flight Center
Huntsville, Alabama   35812

VERSION DESCRIPTION DOCUMENT
FOR THE
NASA PERSONNEL/PAYROLL SYSTEM
SOFTWARE RELEASE 8.8.3

Prepared by

_____   06/13/03
Desiree Gaiser   Date
Technical Lead

Reviewed by

_____   06/13/03   _____   06/13/03
Billy Graham   Date   Jim Cofer   Date
Agencywide IRM, HR   Configuration Management

_____   06/13/03   _____   06/13/03
Hector Garcia   Date   Richard Bishop   Date
Agencywide IRM   DBA

Prepared by

Computer Sciences Corporation, Contract NAS8-60000

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, ALABAMA

06/13/03

**VERSION DESCRIPTION DOCUMENT
FOR THE
NASA PERSONNEL/PAYROLL SYSTEM
SOFTWARE RELEASE 8.8.3**

Approved by

	06/13/03
Marisa Wofford	Date
Consolidation Center Project Manager	

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GEORGE C. MARSHALL SPACE FLIGHT CENTER
HUNTSVILLE, AL

06/13/03

TABLE OF CONTENTS

APPENDICES

1. <u>INTRODUCTION</u>

This Version Description Document (VDD) identifies the exact version of the National Aeronautics and Space Administration (NASA) Personnel/Payroll System (NPPS) software released for installation/implementation.

1.1 IDENTIFICATION OF THE RELEASE

System Name – NPPS

Release Number – Software Release **8.8.3**

The release datasets will be made available to the support Database Administrator (DBA) for installation, at which time all centers will be notified that it has been installed in the appropriate test database.

1.2 PURPOSE OF THE RELEASE

The purpose of this release is to implement the NPPS software allocated for this release in a test environment. The detailed description of the release is specified in Appendix C, Functional Change Validation Procedures.

1.3 SCOPE OF THE RELEASE

The VDD provides the functional and technical user of NPPS with the following information regarding changes to the contents and status of the application, NPPS Release **8.8.3**, including the following:

- Changes implemented since the last release

- References to other documents affected by this release

- Changes to application files and data formats

- Detailed software installation procedures

- Validation procedures to ensure the reliability of the software changes.

1.4 CONTACT POINTS

Sustaining Engineering Support for Agencywide Administrative Systems (SESAAS) provides sustaining engineering for NPPS through the NASA Automated Data Processing (ADP) Consolidation Center (NACC) Technical Services Center located at Marshall Space Flight Center (MSFC). Questions regarding the function and/or the technical aspects as well as the installation of this release should be directed to:

The NACC Technical Services Center (use the following Key Words: SESAAS & NPPS)

Telephone: (256) 544-5516

E-Mail: billy.graham@msfc.nasa.gov

FAX: (256) 544-1836

## 2.	FUNCTIONAL INFORMATION

This section includes details regarding functional changes, functional interfaces, critical issues, affected documents, and application system administration.

### 2.1	FUNCTIONAL CHANGES

Please refer to Appendix C, Functional Change Validation Procedures, for a description of all functional changes related to this release. Appendix D, Installation Instructions, describes all Predict changes related to this release.

### 2.2	FUNCTIONAL INTERFACES

Not Applicable

### 2.3	CRITICAL ISSUES

Not Applicable

### 2.4	AFFECTED DOCUMENTS

The following document will be affected by this release:

NASA Personnel/Payroll System (NPPS) / TALX Interface Control Document (ICD)

The modified pages of this document will be distributed under separate cover.

### 2.5	APPLICATION SYSTEM ADMINISTRATION

Not Applicable

3.   TECHNICAL INFORMATION

This section includes details regarding technical system interfaces, data dictionary changes, software object changes, and database administration.

3.1   TECHNICAL SYSTEM INTERFACES

Not Applicable

3.2   DATA DICTIONARY CHANGES

The data dictionary changes are detailed in Appendix D, Installation Instructions.

3.3   SOFTWARE OBJECT CHANGES

Modified programs are specified in Paragraph 3.2 of Appendix D, Installation Instructions.

3.4   DATABASE ADMINISTRATION

The specific database administration activities for NPPS 8.8.3 are detailed in Appendix D, Installation Instructions.

3.4.1   Release Dataset Names

The datasets for Software Release 8.8.3 are included in the Introduction of Appendix D, Installation Instructions.

3.4.2   Inventory of Objects

An inventory of objects is described in Paragraph 3.2 of Appendix D, Installation Instructions.

3.4.3   Storage Considerations

Not Applicable

3. 4.4 Installation Procedures

Refer to Appendix D, Installation Instructions, for detailed installation procedures.

3.5 OPERATIONAL PREPARATION

Refer to the procedures described in Section 3.4.4 for assistance in preparing for proper installation and operational use of the release.

APPENDIX A
ABBREVIATIONS AND ACRONYMS

ABBREVIATIONS AND ACRONYMS

ADP	Automated Data Processing
CPO	Consolidated Payroll Office
DBA	Database Administrator
DDM	Data Definition Module
DR	Discrepancy Report
HR	Human Resources
ICD	Interface Change Document
IRM	Information Resources Management
JCL	Job Control Language
L&E	Leave and Earnings Statement
MSFC	Marshall Space Flight Center
NACC	NASA ADP Consolidation Center
NASA	National Aeronautics and Space Administration
NPPS	NASA Personnel/Payroll System
RC	Requirements Change
SESAAS	Sustaining Engineering Support for Agencywide Administrative Systems
VDD	Version Description Document

APPENDIX B
GLOSSARY

GLOSSARY

Consolidation Center

Responsibility for processing and balancing payroll for all centers in the consolidated database.

Database Administration

Responsibility for maintaining the physical database environment.

Implementation

The process by which a NASA site installs a software release and places it into operational use.

Operational Preparation

Preparation by a NASA site for installation and use of an application release.

System Administration

Responsibility for administrative functions such as application security and table data maintenance associated with an application.

APPENDIX C

FUNCTIONAL CHANGE VALIDATION PROCEDURES

VALIDATION PROCEDURES
SOFTWARE RELEASE 8.8.3
PERSONNEL & PAYROLL

1. **20020021**

Requirements: To establish anew interface extract from NPPS to TALX, as specified in the NPPS to TALX Interface Control Document (ICD). With the interfaced NPPS data, TALX will have the information necessary to verify NASA employee's employment queries from financial institution, a task that is now performed by NASA Personnel Offices.

Test Data Setup: Calculations for Payroll History File keys depend upon the Payroll History file data being in logical steps of 14 days per pay period and in sync by pay period number where the first pay period of the year is 1 and the last pay period of the year is 26 or 27. To test the condition when employees transfer from one NASA Center to another, multiple Centers' Payroll history files need to be in logical steps and in sync with each other and going back two years. Test data was largely cloned from one Center to another with many repeated employees with the same SSN and information. This cloning would hinder the validation.   "Volume data" does not have these problems, so to avoid a lengthy Payroll data base rebuilding with a history file loading task to handle going back two years for two centers, preferably three centers, it is suggested that Volume data be utilized.

Note: A "STOP" command will be issued for the following three reasons: (1). If all centers selected to be interfaced do not have the same pay period end date as seen on each center's CTLPAY screen. (2). If a center selected by the JCL does not find a CTLPAY record, and (3). If a Personnel master record is missing for an employee to be interfaced.

AD HOC program, TRANSEMP: This program reads the work-file created by NABTALX and identifies employees who have transferred NASA Centers going back to the beginning of the year, the previous year, and two years back from the current year. Volume data used for unit testing had 320 transfers during a reported time frame, with two employees that each transferred twice. This program is executed from JCL external from NPPS and writes the transferred information to the job's out-list.   (See TRANSEMP JCL below)

Validation test summary: Produce a TALX interface data set. Select several employees from the output data set and validate that the interface data reflects the NPPS database. And then validate the trailer record.

Test Steps:

1. Run the interface job to a normal end-of-job. It may be necessary to update CTLPAY

pay ending dates and pay period numbers as necessary. If the count of "EMPLOYEES NOT FINDING A HISTORY RECORD" at the end of the out-list, as pictured below, is high. This could mean that pay period initialization was run before doing the TALX interface for the pay period. A hard coded work-around is noted with comments in the program NABTAXL at about line 2335 to keep from having to changing CTLPAY data.

The execution of TABTALX, for all centers (over 19000 records), usually takes about 15 wall clock minutes but has run in 10 minutes and 31 minutes.

At the conclusion of a good interface run screen print the last screen written to the jobs out-list which shows calculated dates and records written. An example is printed below.

Information on out-list from a TALX interface job.

```
****** CTLPAY READ PAY ENDING DATE / PAY PERIOD ******
CTL-DATE = 20031214
CTL-PERIOD = 26
*
******************** DATES CALCULATED  **************
****          REPORTED PAY PERIOD BEGINNING DATE = 20031201
****          REPORTED PAY PERIOD ENDING DATE = 20031214   P.P.# = 26
****          REPORTED PAY PERIOD PAID DATE = 20031224
****          LAST PP HIST END DATE FOR LAST YEAR = 20011215   P.P.# = 26
**** LAST PP HIST END DATE FOR YEAR BEFORE LAST = 20001216   P.P.# = 26
*
****   FIRST PAY PERIOD DATE FOR CURRENT YEAR    = 20011229
****   FIRST PAY PERIOD DATE FOR PREVIOUS YEAR   = 20001230
****   FIRST PAY PERIOD DATE FOR 'BACK 2' YEAR   = 20000101
*******************************************************
****-----> TOTAL EMPLOYEE RECORDS WRITTEN =        19208
****-----> EMPLOYEES NOT FINDING A HISTORY RECORD =           1
*******************************************************
NEXT FIN
NAT9995 NATURAL SESSION TERMINATED NORMALLY
```

2. Run the AD HOC program, and screen print a page of out-list from this job that will identify employees who have transferred. If the word **"PRIOR"** appears at the end of a line, this will point out an employee who has transferred Centers more than once. The information displayed includes employee's SSN, the Center going FROM and TO, and the employee's termination date and EOD date.

An example of this AD HOC created information from the job's out-list is noted below:

Information on out-list from the execution of the AD HOC program TRANSEMP

```
 --------------------------------------------------------------------------------
 SDSF OUTPUT DISPLAY IRJHGI   JOB04183  DSID   104 LINE 179    COLUMNS
02- 81
 COMMAND INPUT ===>                                   SCROLL ===> PAGE
$$ xxxxx1449 STAT= Z FROM 5100 ON 20031116 TO: 1000 ON 20031117 STAT= D
$$ xxxxx9261 STAT= Z FROM 7200 ON 20010421 TO: 7600 ON 20010422 STAT= D
$$ xxxxx2481 STAT= Z FROM 5100 ON 20030601 TO: 2200 ON 20030602 STAT= D
$$ xxxxx2481 STAT= Z FROM 2100 ON 20000701 TO: 5100 ON 20000702 STAT= Z
PRIOR
$$ xxxxx8108 STAT= Z FROM 2200 ON 20030907 TO: 5100 ON 20030908 STAT= D
$$ xxxxx8671 STAT= Z FROM 7200 ON 20010113 TO: 7600 ON 20010114 STAT= D
$$ xxxxx7877 STAT= Z FROM 6200 ON 20010811 TO: 6400 ON 20010812 STAT= D
$$ xxxxx5359 STAT= Z FROM 2100 ON 20030921 TO: 2400 ON 20030922 STAT= D
$$ xxxxx2326 STAT= Z FROM 2200 ON 20000923 TO: 2300 ON 20000924 STAT= D
$$ xxxxx5693 STAT= Z FROM 2200 ON 20010922 TO: 7200 ON 20010923 STAT= D
$$ xxxxx2317 STAT= Z FROM 2200 ON 20010728 TO: 1000 ON 20010729 STAT= D
$$ xxxxx4729 STAT= Z FROM 7600 ON 20010630 TO: 7200 ON 20010701 STAT= D
$$ xxxxx7849 STAT= Z FROM 6200 ON 20031130 TO: 6400 ON 20031201 STAT= D
$$ xxxxx4001 STAT= Z FROM 6200 ON 20000729 TO: 1000 ON 20000730 STAT= D
$$ xxxxx0306 STAT= Z FROM 1000 ON 20000129 TO: 5100 ON 20000130 STAT= Z
$$ xxxxx8251 STAT= Z FROM 6400 ON 20030112 TO: 1000 ON 20030113 STAT= D
$$ xxxxx6416 STAT= Z FROM 7600 ON 20010728 TO: 1000 ON 20010729 STAT= D
$$ xxxxx7843 STAT= Z FROM 7200 ON 20010224 TO: 6200 ON 20010225 STAT= D
```

3. Go to =3.4, under TSO, and BROWSE the data set created in step 1.   Select a couple of employees and screen-print the employee's records after entering the command "COL" to indicate columns along the top of the data. These records will all be 960 bytes long. After columns 401 to 480 appear you need not print the remainder of the records, just assure that after field# 41, column 453, the rest of the records are blank. You may want to select an employee that transferred more than once, and an employee that didn't transfer Centers.

4. Enter the most **current Center**, and screen print the following screens for the selected employees; PERSON, ADDR, and the first two personnel screens from the EMPSERV (Personnel service record) screen.

5. Then go to the QHISTPP screen and enter the <u>current-pay-period-end-date</u>, the employee's <u>SSN</u>, and the screen <u>YTDADJ1</u>. Screen print YTDADJ1 (2 of 6). If the employee transferred to the current Center during the current year, go to that previous center. Then go to QHISTPP, and enter the pay-period-end-date for the pay period that includes the employee termination date. The pay-period-end-date will always be a Saturday date, and this Saturday pay-period-end-date will be equal or greater than the employee's termination date but not more than thirteen days beyond the termination date. The employee's termination date is on the AD HOC out-list, and may also be seen on the employee's LUMP screen. Repeat this procedure for the previous year and for the back2 year. Screen-print these YTDADJ1 (2 of 6) screens. For employees that do not transfer between Centers three accesses to QHISTPP using the current pay period end date, the last pay period for the previous year, and the last pay period for the back-2 year. These pay period are displayed on the job out-list after the TALX interface job is executed.

6. Validate that the employee data screen-printed NPPS data is correctly reflected in the employee's interfaced record, and that the columns and format of the data is as indicated in the ICD.

7. The TALX interfaced salary code for Annual, Daily, and Hourly (interface field# 22) is derived from the Payroll field PAY-PAID-DAILY-HRLY that doesn't appear on a Payroll screen. This Payroll field is the right character of a two-character field PER-PAYBASIS that does appear on the PERACT screen 1 of 10. This NPPS value is converted to a TALX value as noted in the ICD for field# 22 where A = 01, D = 08, and H = 09. A reasonability check should be done to verify that the salary field value interface field# 21 is reasonable for Annual, Daily, or Hourly.

<u>Steps to validate the trailer record:</u>

1. Validate that the first eight columns are eight "*" characters. (i.e. ********)

2. Columns 9 through 56 should be numbers, no space fill. And columns 57 through the end of the record should be spaces. There should be only one trailer record at the end of the data set.

3. The last three number, columns 54 through 56 should be zeroes.   And the first number should be the sum of the other numbers.

4. Verify the status counts for total "A" records, total "I" records, total "L" records, and total "other" records.

To do this go to TSO =3.4 and view the TALX interface data set with the BROWSE mode. To count the total "A" status records go to the "TOP" of the data and on the command line type in "FIND A 212 212 ALL" and hit enter. TSO will inform you from the top right corner of the number of "A" values in column 212. Repeat the process for "I" values and "L" values.   Then subtract these three value counts just received from the total number of records and that should be the total "other" values.

C-4

NASA PERSONNEL PAYROLL SYSTEM
RELEASE DESCRIPTION
SOFTWARE RELEASE 8.8.3
JUNE 2003

The purpose of this release is to implement the changes allocated to software release 8.8.3 described below.

SOFTWARE RELEASE 8.8.3

RC 1620s IMPLEMENTED

CCR	Description
20020021	TALX Interface

***** **RECORD COUNT = 01**

APPENDIX D
INSTALLATION INSTRUCTIONS

NASA PERSONNEL PAYROLL SYSTEM
RELEASE DESCRIPTION
SOFTWARE RELEASE 8.8.3
June 2003

Introduction

Release Date – June 13, 2003

Release Inventory:

Dataset Names:

The following dataset is located on the transient storage DASD volumes under the following dataset name:

- MSMOV.NPPS.PROD.R883.R0603.SRC

Physical media:
    VDD

In case of installation problems contact the NACC Technical Services Center (Use following Key Words: SESAAS & NPPS):

Telephone: (256) 544-5516
E-Mail: billy.graham@msfc.nasa.gov
Fax: (256) 544-1836

Installation Sequence
The sequence in which the installation of this release should occur is provided in the following list. Applicable sections are listed in the Installation Checklist.

 1.0 Backup Existing Data
 2.0 Copy Source/Object Code
 3.0 Pre-Predict Data Conversion
 4.0 Install Predict
 5.0 Install Data Glossary
 6.0 Catalog Source Code
 7.0 Post-Predict Data Conversion
 8.0 JCL/BJS/Xerox Modifications
 9.0 Special Instructions
10.0 Installation Checklist

1.0   BACKUP EXISTING DATA

It is advisable to back up all NPPS files as a precautionary measure prior to installation of software release.

2.0   COPY SOURCE

2.1   Copy Source Modules

When installing software release 8.8.3, load the NPPS new and modified programs from dataset MSMOV.NPPS.PROD.R883.R0603.SRC using the Natural utility NATLOAD. The source programs were unloaded using the Natural utility NATUNLD. The programs will be loaded to the application library NPPS, replacing any existing programs of the same name. The source module counts included in this release are listed below:

Natural Source Modules by Type

Global Data Areas	0
Copycode	0
Maps	0
Helproutines	0
Subroutines	0
Subprograms	0
Local/Param Data Areas	0
Programs	1
Text	0
Process	0
Miscellaneous Objects	0

===============================

Total Programming Objects	1
Total Views Unloaded	1
Total Objects Read	0
Total Object Unloaded	1

2.2   List of Source Code Modifications

Not applicable

2.3   List of Source Code Additions

The following is a list of all modules that were created for the software release 8.8.3.

MODULE	Description
NABTALX	NPPS Interface of Employee Data to TALX

RELEASE PROGRAMS (NEW) ==> 01

2.4   List of Source Code Deletions

Not applicable

3.0   PRE-PREDICT DATA CONVERSION

Not applicable

4.0   INSTALL PREDICT

4.1   Data Dictionary Changes

Not applicable

4.1.1 Inventory of Objects

Not applicable

4.1.2 Storage Considerations

Not applicable

4.1.3 Physical File Changes

Not applicable

5.0   INSTALL DATA GLOSSARY

Not applicable

6.0   CATALOG SOURCE CODE

When installing software release 8.8.3, run a batch job to catalog (CATALL) all modules in the NPPS or other named library. It is not necessary to catalog the Global Data Area. The Batch standard parameters should be used for the compile.

After objects are compiled, the NPPS application will run under the On-line standard parameters.

7.0   POST-PREDICT DATA CONVERSION

Not applicable

8.0   JCL/BJS/Xerox MODIFICATIONS

JCL/BJS

An example of the JCL needed to execute the TALX interface.

A version of this JCL has been placed/named:
MSIRM.NPPSDD.JCL(TALXINTR)

```
******************************* Top of Data *************************
000100 //IRxxxI   JOB (MSIRMNPPS004),xxxxxx,
000200 //         CLASS=D,MSGCLASS=A,
000300 //         NOTIFY=MSxxx
000601 //ALOC1 EXEC PGM=IEFBR14
000604 //DD1 DD DSN=MSIRM.NPPSDD.TALXTEST.TEST,
000605 //  DISP=(MOD,DELETE),UNIT=SYSDA,SPACE=(TRK,0)
000606 //DD2 DD DSN=MSIRM.NPPSDD.TALXWORK.DATA,
000607 //  DISP=(MOD,DELETE),UNIT=SYSDA,SPACE=(TRK,0)
000610 //JS010 EXEC Nxxxxx
000630 //CMWKF01 DD DSN=MSIRM.NPPSDD.TALXTEST.TEST,
000640 //   UNIT=SYSDA,DISP=(NEW,KEEP),
000650 //   SPACE=(CYL,(40,5),RLSE),DCB=(LRECL=960,RECFM=FB,BLKSIZE=9600)
000651 //CMWKF02 DD DSN=MSIRM.NPPSDD.TALXWORK.DATA,
000652 //   UNIT=SYSDA,DISP=(NEW,KEEP),
000653 //   SPACE=(CYL,(10,5),RLSE),DCB=(LRECL=128,RECFM=FB,BLKSIZE=9600)
000660 //* >>>>>>>>>>> ENTER CENTER NUMBERS FOLLOWING PROGRAM NABTALX
000670 //*
000710 //CMSYNIN DD *
000720 %*
000800 library,MSxxx
000900 MSxxx
001000 %*
001310 NABTALX
001320 1000210024002200510072007600230062006400
001400 FIN
002400 /*
***************************** Bottom of Data*************************
```

> TALX
> INTERFACE
> DATA SET

An example of the JCL needed to execute the AD HOC program.

A version of this JCL has been placed/named: MSIRM.NPPSDD.JCL(TALXAHOC)

```
******************************* Top of Data ****************************
000100 //IRxxxI   JOB (MSIRMNPPS004),xxxxxx,
000200 //         CLASS=D,MSGCLASS=A,
000300 //         NOTIFY=MSxxx
000601 //ALOC1 EXEC PGM=IEFBR14
000610 //JS010 EXEC Nxxxx
000620 //CMWKF02 DD DSN=MSIRM.NPPSDD.TALXWORK.DATA,DISP=OLD
000651 //*
000660 //* >>>>>> PROGRAM TO PICK OUT EMPLOYEES THAT TRANSFERRED CENTERS
000670 //* >>>>>> RESULTS ON THE JOB OUTLIST
000710 //CMSYNIN DD *
000720 %*
000800 Library,MSxxx
000900 MSxxx
001000 %*
001310 TRANSEMP
001400 FIN
002400 /*
002500 //
***************************** Bottom of Data **************************
```

Xerox

Not applicable

9.0   SPECIAL INSTRUCTIONS

9.1   Update NPPS Release Number

The following process will update the NPPS software numbers:
1.   Execute program TOOLVRSN from the Natural Command line.
2.   When installing software release 8.8.3, enter "8.8.3" for software version number.
3.   Press ENTER; a confirmation message displays.
4.   Press PF3 to exit the program.

10.0   INSTALLATION CHECKLIST

1.0   Back Up Existing Data
2.0   Copy Source
6.0   Catalog Source Code
8.0   JCL/BJS/Xerox Modifications
9.0   Special Instructions